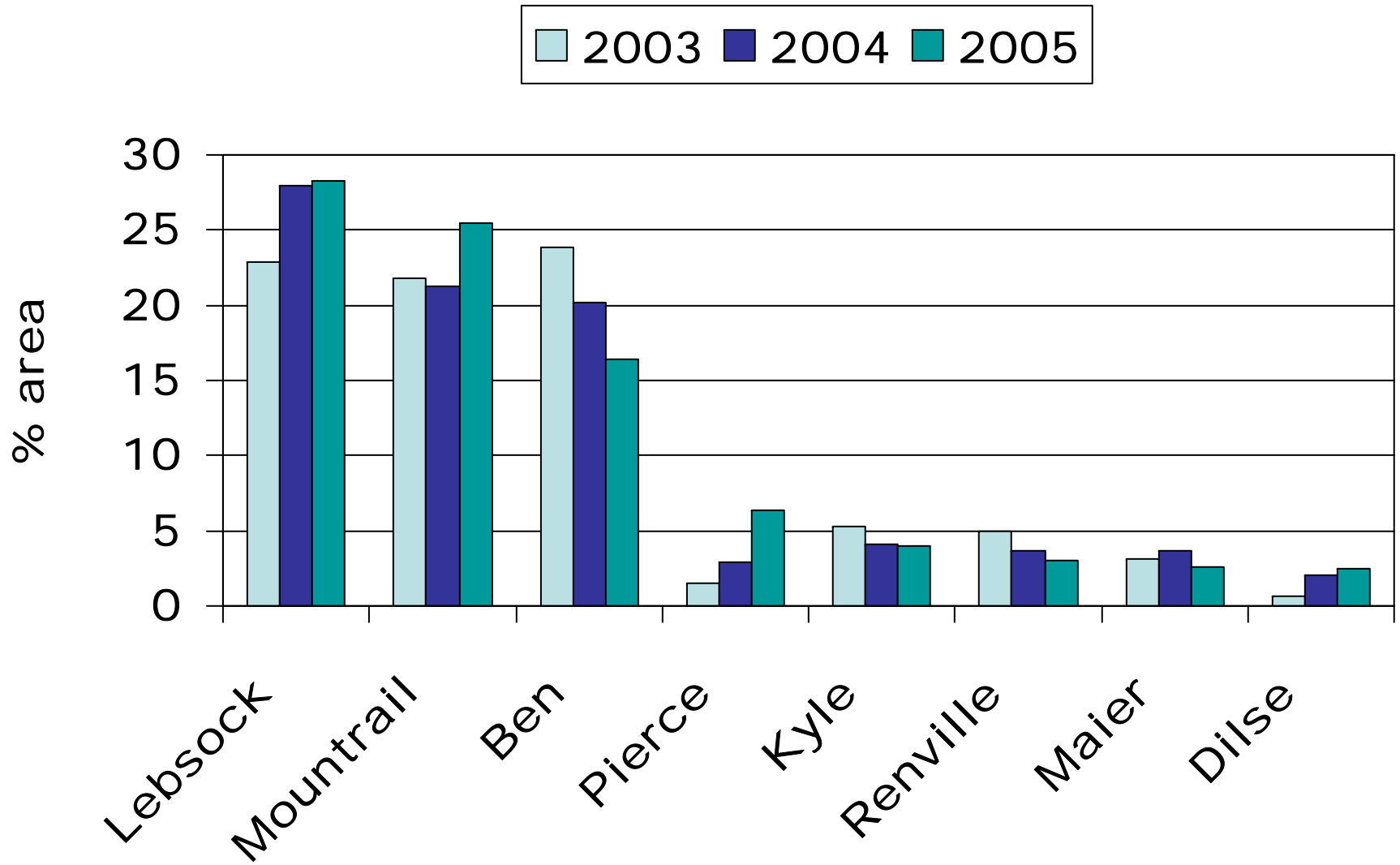


Durum Variety Update

Kent McKay
Area Extension Agronomist
NCREC, Minot, ND

Durum varietal use, 2003-05



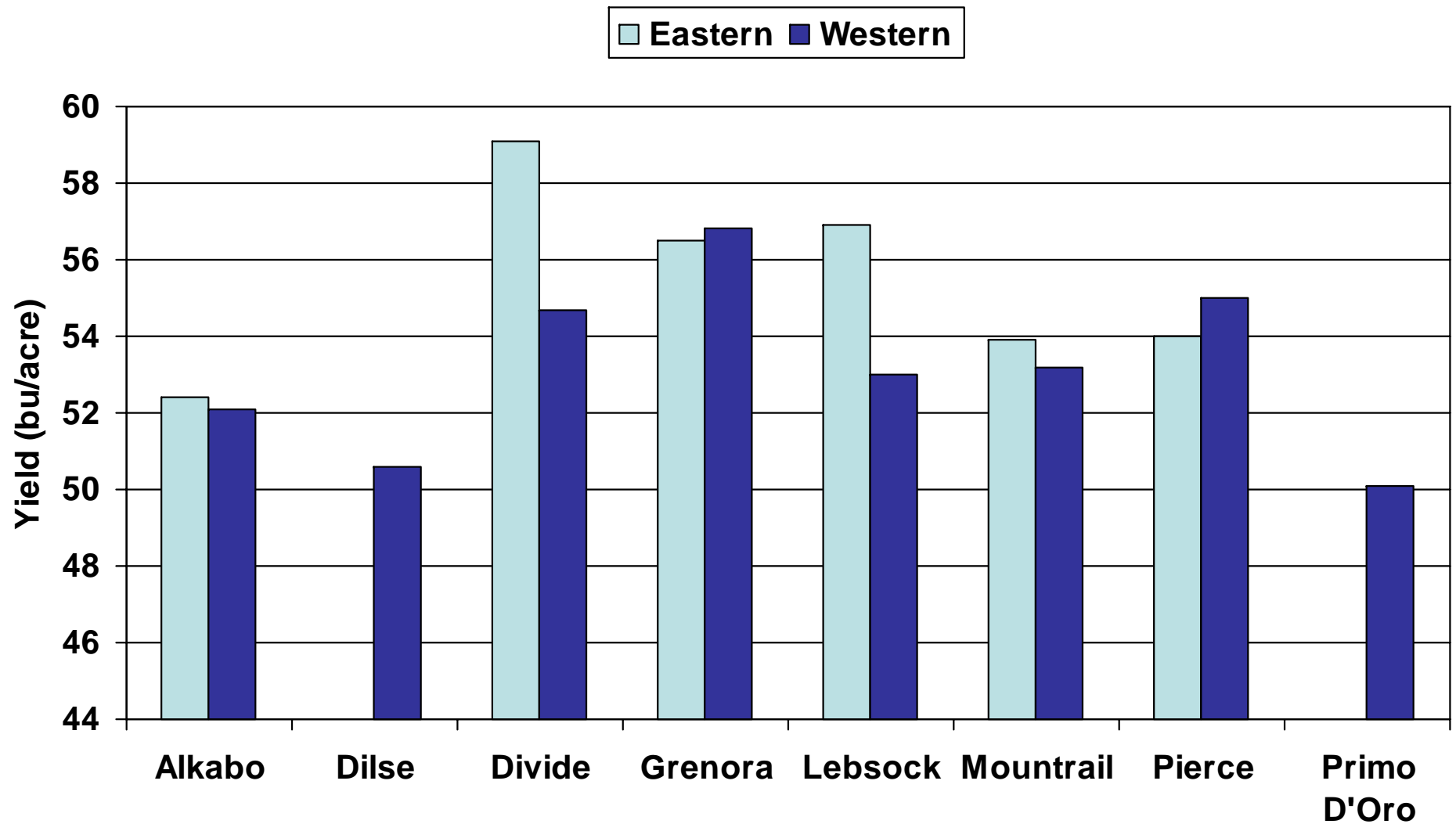
Durum Varieties and FHB

- **Durum varieties are more susceptible to FHB than spring wheat**
 - Belzer rated as MR
 - Had low test weight
 - Lebsock rated MS
 - Has very high test weight
 - Alkabo, Divide, Grenora; new NDSU releases

2005 New Durum Releases

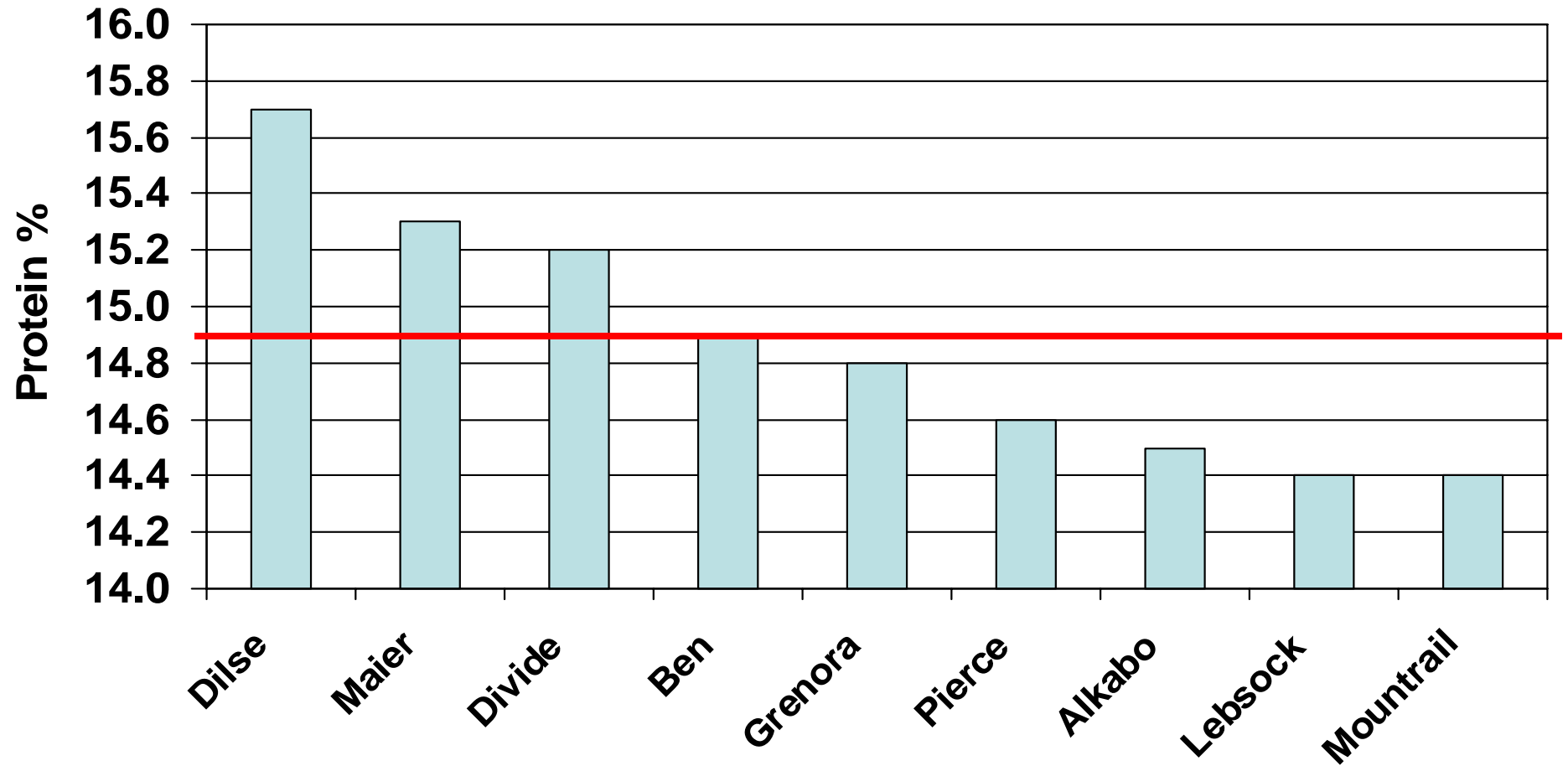
- **Divide**
 - Ben/Belzer
- **Alkabo**
 - Direct parents experimentals
 - Renville, Ward, Fjord, Rugby, Crosby, Vic
- **Grenora**
 - Direct parents experimentals
 - Sceptre, Laker, Vic, Cando, Ward

Comparative yield of durum varieties, 2005



Durum Wheat Quality Descriptions

Protein 2000-2004



14.9 % Trial Average

Langdon Durum, 2005

Variety	Lodging 0-9	FHB Inc %	FHB FS %	Tomb- stone %	Yield Bu/A	TW lb/bu
Divide	4.5	24.5	0.4	2.0	69.3	58.6
Grenora	3.3	37.8	1.4	2.0	76.7	57.4
Alkabo	0.5	31.1	0.7	2.5	70.0	58.8
Munich	0.0	22.2	0.5	4.0	64.5	56.3
Ben	1.8	44.5	2.2	2.8	62.3	58.2
Belzer	6.8	28.9	0.6	2.5	64.8	56.1
Mountrail	0.8	33.3	0.9	3.8	68.6	56.9
Lebsock	0.3	28.9	0.7	2.0	70.1	58.6
Pierce	1.8	33.3	1.0	1.3	66.8	58.5
Primo Doro	1.3	28.9	0.7	2.8	64.8	59.1
Trial Mean	1.5	34.2	1.2	3.3	66.7	57.6

Langdon REC Durum, 2005

Tombstone Kernels %

Variety	Langdon	Devils Lake	Perth
Divide	2.0	2.0	5.3
Grenora	2.0	2.8	5.5
Alkabo	2.5	2.8	2.8
Mountrail	3.8	2.5	3.8
Lebsock	2.0	2.3	4.0
Pierce	1.3	2.3	3.0
Primo Doro	2.8	2.3	3.8
Dilse	3.0	2.5	4.5
Trial Mean	3.3	2.5	4.3

Langdon REC Durum, 2005

FHB Incidence %

Variety	Langdon	Devils Lake	Perth
Divide	24.5	33.3	69.0
Grenora	37.8	41.7	55.0
Alkabo	31.1	51.7	55.0
Mountrail	33.3	36.7	64.0
Lebsock	28.9	40.0	33.0
Pierce	33.3	48.4	67.0
Primo Doro	28.9	51.7	33.0
Dilse	40.0	50.0	67.0
Trial Mean	33.3	44.3	55.0

Langdon REC Durum, 2005

Yield Bu/A

Variety	Langdon	Devils Lake	Perth	3 Location Avg.
Divide	69.3	59.0	49.1	59.1
Grenora	76.7	57.8	50.3	61.6
Alkabo	70.0	52.2	42.7	55.0
Mountrail	68.6	58.4	39.5	55.5
Lebsock	70.1	57.9	49.9	59.3
Pierce	66.8	54.8	47.2	56.3
Primo Doro	64.8	44.3	38.5	49.2
Dilse	65.9	54.4	40.5	53.6
Trial Mean	66.7	54.5	43.9	

Langdon REC Durum, 2005

Test Weight lb/Bu

Variety	Langdon	Devils Lake	Perth	3 Location Avg.
Divide	58.6	60.2	56.7	58.5
Grenora	57.4	59.4	56.2	57.7
Alkabo	58.8	59.5	57.1	58.5
Mountrail	56.9	59.8	55.8	57.5
Lebsock	58.6	60.8	57.8	59.1
Pierce	58.5	60.1	58.4	59.0
Primo Doro	59.1	59.4	56.2	58.2
Dilse	58.1	59.6	56.0	57.9
Trial Mean	57.6	59.9	56.6	

Carrington Durum, 2005

Variety	Lodging 0-9	FHB Sev %	Leaf DIs %	Yield Bu/A	TW lb/bu
Divide	1.3	12.1	38.3	49.0	57.5
Grenora	0.0	21.1	50.0	45.2	55.8
Alkabo	0.5	25.3	46.7	43.4	56.7
Munich	0.0	18.8	56.7	38.4	54.0
Ben	0.8	21.2	36.7	40.8	56.3
Belzer	2.3	9.7	63.3	48.7	57.0
Mountrail	0.0	20.3	46.7	46.6	55.9
Lebsock	0.0	15.9	51.7	48.2	58.5
Pierce	0.8	24.7	68.3	41.3	57.0
Primo Doro	0.3	19.4	63.3	41.5	56.6
Trial Mean	0.6	21.6	56.3	42.0	56.0

NCREC Durum, 2005

4 location Avg.

Variety	Protein %	Test Wht. Lb/bu	YIELD BU/A
Alkabo	12.9	60.3	65.3
Ben	14.0	60.5	66.9
Dilse	14.3	60.1	66.5
Divide	13.5	60.2	70.7
Grande Doro	13.0	60.1	61.1
Grenora	13.1	59.4	71.9
Lebsock	13.4	61.0	64.5
Maier	14.2	59.7	65.6
Pierce	13.1	60.8	73.4
Primo D'oro	13.5	60.9	68.3
Renville	13.0	59.1	66.3
Mean Avg.	13.4	59.7	66.8

New Durum Varieties and FHB

- **Divide**

- Had lower tombstone and FHB severity ratings (except at Perth), lower leaf diseases, higher test weight and yield than the trial means at 3 out of 4 locations where scab was rated as moderate or higher.

- **Grenora:**

- Had lower tombstone and FHB severity at 2 of 4 locations
- Had highest yield averaged across the 3 northeast locations in 2005
- Test weight is average at best

- **Alkabo:**

- Looks to be the most susceptible to scab of the 3 new releases
- Yield and test weight were above the trial means at most locations

Top Durum Picks for 2006

- **Lebsock, Pierce:**
 - It's all about the test weight; very high
- **Maier, Dilse**
 - Average yield, above average protein

Questions